

PHENIX Technical Support 2009

PHENIX

C-A Coordination

5/11/2009

Don Lynch



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Shutdown '09

Shutdown '09 Major tasks (expect 5 month shutdown):

- EOR party June 26/2009 shutdown Begins June 28
- End run, remove wall, MuID collars down, EC to AH (3 weeks)
- RPC Factory Operations (in progress and continuing beyond Shutdown '09)
- RPC Station 3 North (entire shutdown)
- Install Station 1 South scaffolding (1 week)
- Install Station 2/3 scaffolding (2 weeks)
- Install stations 1, 2 and 3 south MuTrigger FEE's (12 weeks)
- MuTr decapacitations: station 3 south (3 weeks)
- PC1 East repair (4 weeks)
- Mechanical/Electrical Plumbing installation of (4) new DCM racks
- Add Ar Dewar and expand gas pad to add storage (12 weeks)
- Prep for future upgrades/existing equipment maintenance & Repair (as necessary)

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Shutdown Prep
Now to June 28

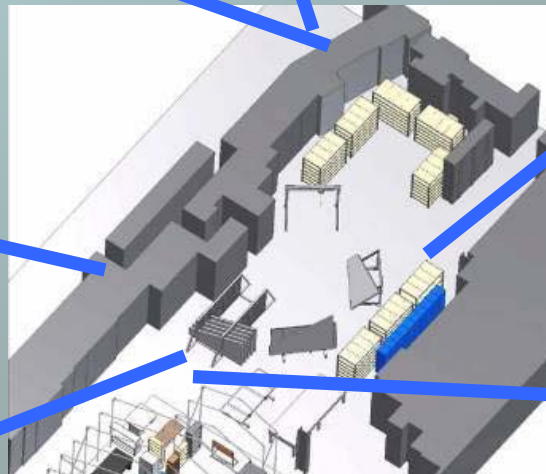
Task	Complete By
RPC Installation design parts & Tools	May 15
RPC Electronics Rack Prep	June 20
RPC Installation parts and Tools Fabrication	June 28
MuTrigger FEE Parts and Tools ordering	June 28
MuTrigger FEE Cable Management plan	June 15
RPC3 N Cable and Piping relocation Plan	June 15
RPC Factory Tools complete and commissioned	June 28

Task	Completion Date
• End of Run Party	6/26
• End of Run 9	6/28
• Flammable Gas Purge	6/30
• Open Wall and Disassemble	7/2
• MuID Collar Removal	7/8
• Move MMS South	7/10
• Test RMC Higher comm speed on EC before disconnecting	7/15
• Disconnect EC and move to AH	7/17
• Move MuID Collars to AH	7/20
• Install IR floor plates, rolling cart & manlift in IR	7/22
• Reconnect EC for shutdown mode	7/24
• Remove East/West vertical & Upper Bias MMS lampshades	7/24

- Gap and Module assembly and testing (continues through shutdown) in-progress
- Gap and Module Storage with humidity control (need to get permanent elec., 2nd humidity controller & covers for last 3 storage racks) Nearly complete
- Tilting transport Table Nearly complete
- Burn in test stand (Bike rack section) In Progress
- Burn-in test stand gas system and controls (ready for 1st half octant) 5/29
- Assembly of half-octants for station 3 north 6/1-9/1

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RPC Factory



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RPC3 North Installation Schedule

Task	Completion Date
Installation Concept Finalized	Apr. 24
Half-Octant Brackets, Connecting Blocks, under detector translating support design	Apr. 30
Installation Fixturing and Tooling Design	May 15
Redesign crystal palace/IR Gas Barrier	May 29
End of Run 9	June 28
Fixturing/Tooling, Brackets/Block/support Fabrication	June 30
Move Shielding/Remove Crystal Palace	June 29-July 31
Move cable trays and piping in gap 5	June 29-July 31
Simulated (practice) installation with new fixturing/ tooling	July 13-July 31
Install, level & survey support structure	Aug. 3 - Aug 14
Half Octant Testing and Assembly Complete (1 st half Octant ready by Aug.17, 16 th by Sep.18)	Aug. 17- Sep. 18
Mechanical Install Align & survey RPC3 N	Aug 17 - Sep. 30
Install 3 elect. Racks, all cables & gas system	Oct. 1 - Oct. 30
Commissioning	Nov. 1 - Nov. 30
Install new crystal palace/IR Gas Barrier & Shielding	Nov. 1 - Nov. 30
Start Run 10	Dec. 1

Task	Completion Date
• Install Station 1 South Scaffold (carpenters)	7/31
• Install Station 1 cable management	8/14
• Install station 2/3 scaffolding (Techs)	8/14
• Install station 1 FEE's & Electronics	8/28
• Install station 2 & 3 cable mngment	8/28
• Station 1 plumbing	9/11
• Install station 2/3 FEE's & electronics	9/25
• Station 2/3 plumbing	10/9

MuTr Decapacitations

Task

Completion Date

Station 2/3 Decaps

8/14-8/28

Testing/verification

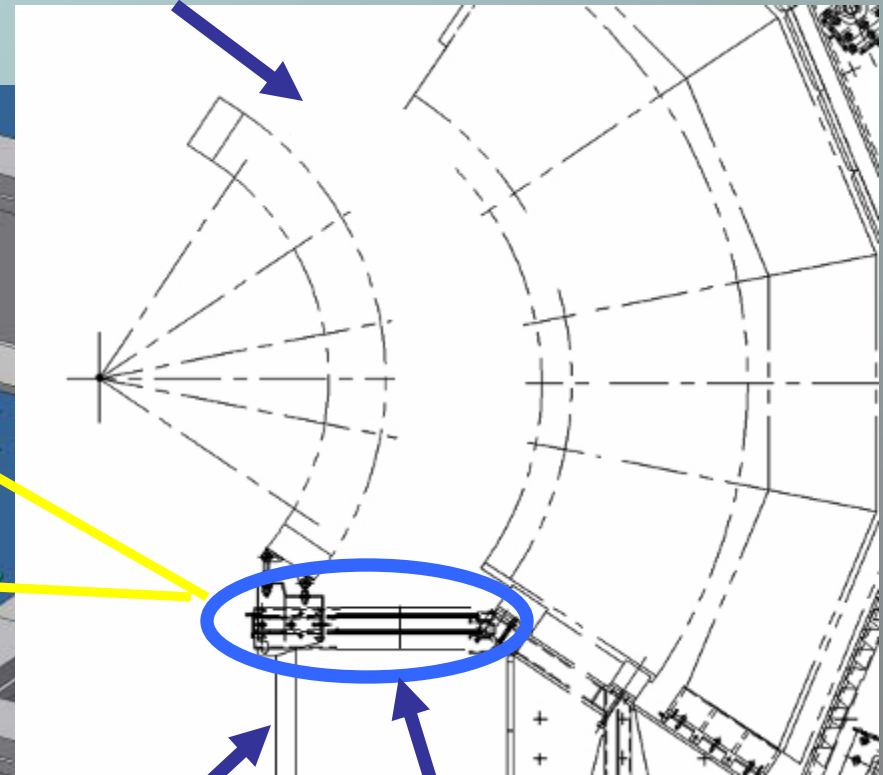
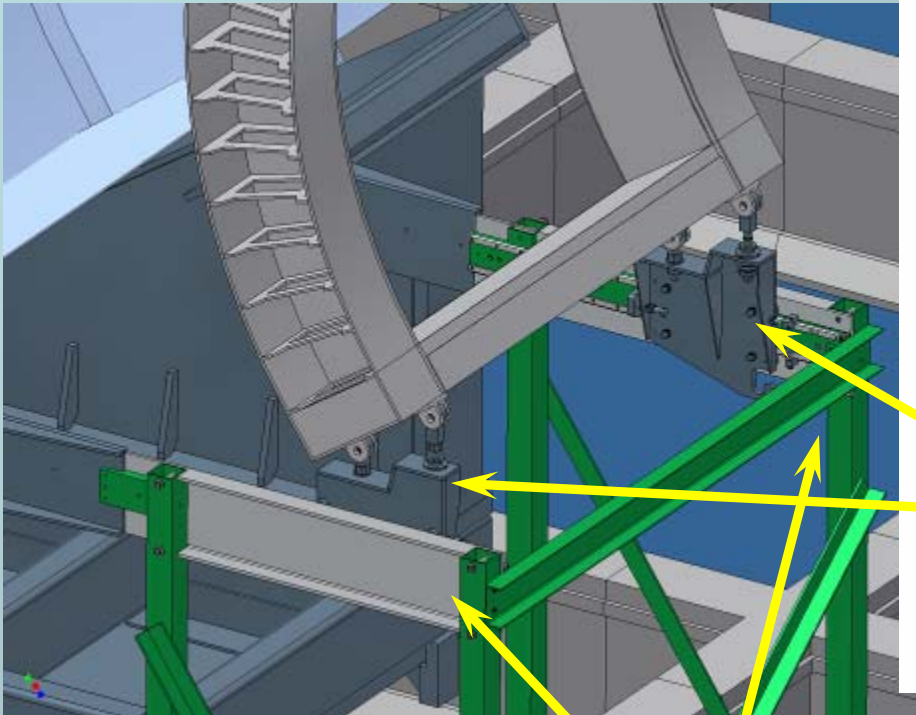
9/4

Task	Completion Date
• Design Repair support fixture	Done
• Review and approval	Done
• Fabrication	7/1 (order placed)
• Install support fixture	8/14
• Remove cables and plumbing	8/28
• Roll out DC/PC1	9/4
• Replace failed PC1	9/11
• Roll DC/PC1 in	9/18
• Restore cables and plumbing	9/25
• Test/commissioning	10/2

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PC1 East Repair Fixturing Design

Access to PC1 is adequate
to remove and replace module



New Column Supports
Under railway extensions

New Railway extensions
will allow DC to be pulled out
~ 3 feet more

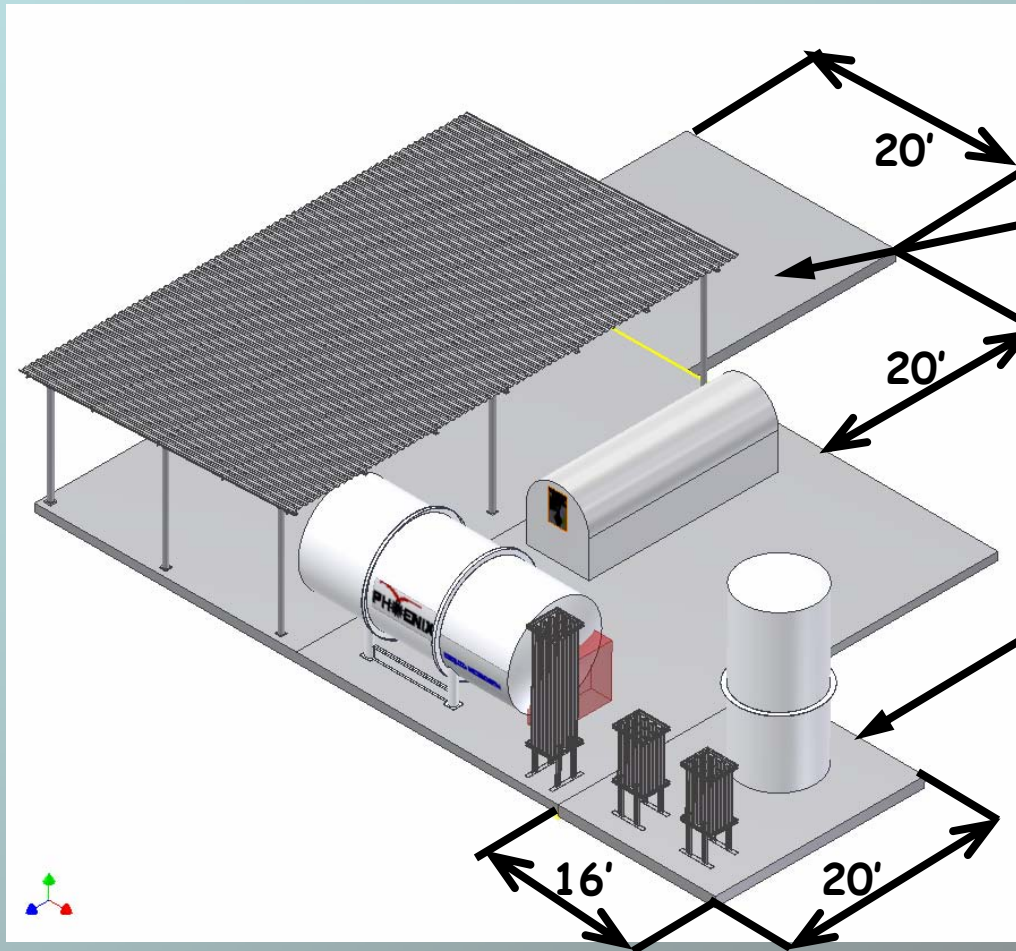
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Gas Pad Expansion, New Argon Dewar

Task	Completion Date
• Proposal	Done
• Review and Approval	5/1
• Design	6/1
• Site Preparation	7/1
• Install Empties racks	8/1
• Install Ar Dewar	9/1
• Test and Commission	10/1

(Rough guess actual schedule TBD)

New Argon Dewar



New storage pad for empty gas cylinders, 20'x 20', 9" min thick. reinforced concrete

New Argon Dewar Pad, 16' x 20', 12" minimum thickness, reinforced concrete.

Met with Dave Phillips to walk thru the plan

New DCM Rack Plumbing

(Not Scheduled Yet)



4 new DCM racks need cooling
water plumbing

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Other Work

Upgrades Support:

New Beampipe sections (non-Be)

New Beampipe supports

FOCAL prototype design support

VTX fabrication tooling design

VTX installation design

FVTX design/eng'g support

Summer Sunday Prep

TBD Existing Detector Maint & Repairs

Maintenance & Overhead Tasks

Rack Room Reorganization

C-A-D AC, Water System, Electrical system work which may impact shutdown schedule: *Tasks, schedules, priorities TBD*

